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Sheet of 1 ATTY. DOCKET NO. SERIAL NO. U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE FORM PTO-1449 08/409,122 19425 INFORMATION DISCUSSION THE GOVERNMENT APPLICANT(S) (Use several short if necessary J. G. JOYCE, ET AL. FILING DATE **GROUP ART UNIT** Mar 22, 1995 **U.S. PATENT DOCUMENTS** FILING DATE IF APPROPRIATE DOCUMENT NUMBER **EXAMINER** CLASS SUBCLASS DATE NAME INITIAL MC 435 69.1 LOWY ET AL. 5,437,951 8/1/95 FOREIGN PATENT DOCUMENTS TRANSLATION EXAMINER INITIAL **DOCUMENT** COUNTRY CLASS **SUBCLASS** DATE NUMBER YES NO OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.) of the same of the same of the same The wasting the Silvine DATE CONSIDERED **EXAMINER** 

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Sheet of 2 ATTY, DOCKET NO. SERIAL NO. U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE FORM PTO-1449 19425 08/409,122 APPLICANT(S) INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary) J. G. JOYCE, ET AL. FILING DATE **GROUP ART UNIT** Mar 22, 1995 1813 OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.) Browne retail. "Analysis of the L1 Gene Product of Human Papillomavirus Type 16 by Expression in a Vaccinia Virus Recombinant" J. Gen. Virol. (1988) Vol. 69, pp. 1263-1273.  $M \subseteq$ Doorbar, et al., "Identification of Proteins Encoded by the L1 and L2 Open Reading Frames of Human Papillomavirus 1a", J. of Virol., Sept. 1987, Vol. 67, No. 9., pp. 2793-2799. ML Hanenese, et al., "Self-Assembly of Human Papillomavirus Type 1 Capsids by Expression of the L2 Protein Alone or by Coexpression . . .", J. of Virol., Jan. 1993, Vol. 67, No. 1, pp. 315-322. MU Kirnbauer, R., "Papillomavirus L1 Major Capsid Protein Self-assembles into Virus-like Particles that are MU Highly Immunogenic", Proc. Natl. Acad. Sci., Vol. 89, pp. 12180-12184, Dec. 1992. LeCann, et al., "Self-Assembly of Human Papillomavirus Type 16 Capsids by Expression of MU the L1 Protein in Insect Cells", FEMS Microb. Lett., 117 (1994), pp. 269-274. Lin, et al., "Effective Vaccination Against Papilloma Development by Immunication with L1 or M( L2 Structural Protein . . . ", Virology, Vol. 187, (1992) pp. 612-619. Rose, et al., "Expression of Human Papillomavirus Type 11 L1 Protein in Insect Cells: In Vivo and In Vitro Assembly of Viruslike Particles", J. of Virol., Apr. 1993, pp. 1936-1944. Steele, et al., "Humoral Assays of Human Sera to Disrupted and Nondisrupted Epitopes of Human Papillomavirus Type 1", Virology, Vol. 174, (1990) pp. 388-398. Strike, et al., "Expression in Escherichia Coli of Seven DNA Fragments Comprising the Complete L1 and L2 Open. . . ", J. Gen. Virol. (1989) Vol. 70, pp. 543-555. Zhou, et al., "Synthesis and Assembly of Infectious Bovine Papillomavirus Particles In Bitro", J. Gen. Virol., (1993), Fol. 74, pp. 763-768. Zhou, et al., "Expression of Vaccinia Recombinant HPV HPV 16 L1 and L2 ORF Proteins in Eipthelial Cells . . . ", Virology, Vol. 185, (1991), pp. 251-257. Zhou, et al., "Increased Antibody Responses to Human Papillomavirus Type 16 L1 Protein Expressed by Recombinant Vaccinia . . . ", J. Gen. Virology, (1990), Vol. 71, pp. 2185-2190. Sasagawa, et al., "Synthesis and Assembly of Virus-like Particles of Human Papillomaviruses Type 6 . . . ", Virology, 206, pp. 126-135 (1995) **EXAMINER** DATE CONSIDERED

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| ML   | WO 94/20137             | 9/15/94     | PCT    |                                       |   |                    |            |    |          |
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Mar 22, 1995

J. G. JOYCE, ET AL.

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